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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,409	07/09/2003	Sharlene Adams	I0248.70024US00	9289

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EXAMINER	
FETTEROLF, BRANDON J	

ART UNIT	PAPER NUMBER
1642	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/616,409	ADAMS ET AL.	
	Examiner	Art Unit	
	Brandon J. Fetterolf, PhD	1642	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *See Continuation Sheet* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-18, 24-25, 30, 81, 90, 97, 139, 142, 144, 166, 168, 177, 182, 184, 188, 191, 195, 197, 210, 251-261, 290, 320 and 338* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-17, 25, 139, 142, 144, 166, 210, 251-259 and 338, as specifically drawn to a method for stimulating an immune response in a subject comprising administering to a subject in need of immune stimulation an agent of Formula I, and an antibody or antibody fragment, in an amount effective to stimulate an immune response, wherein the subject is suffering from cancer, classified in class 424, subclass 155.1.

II. Claims 1-17, 30, 81, 139, 142, 144, 166, 210, 251-260 and 338, as specifically drawn to a method for stimulating an immune response in a subject comprising administering to a subject in need of immune stimulating an agent of Formula I, and an antibody or antibody fragment, in an amount effective to stimulate an immune response, wherein the subject is suffering from an infectious disease, classified in class 424, subclass 160.1.

III. Claims 18, 195 and 197, as specifically drawn to a method for stimulating an immune response in a subject having cancer comprising administering to a subject in need of immune stimulating an agent of Formula I, and an antigen, in an amount to stimulate an antigen-specific immune response, classified in class 514, subclass 2.

IV. Claims 24, 188 and 191, as specifically drawn to a method for stimulating an immune response in a subject comprising administering to a subject in need of immune stimulating an agent of Formula I, and an antigen, in an amount to stimulate an antigen-specific immune response, classified in class 514, subclass 2.

V. Claims 90 and 97, as specifically drawn to a method for stimulating an immune response in a non-immunocompromised subject comprising administering to a

subject an agent of Formula I, in an amount effective to induce IL-1, classified in class 514, subclass 16.

VI. Claim 168, as specifically drawn to a method of treating a subject having or at risk of developing an IFN-responsive condition comprising administering to a subject in need of such treatment an agent of Formula I in an amount effective to induce a therapeutically or prophylactically effective amount of IL-1 in the subject, classified in class 514, subclass 16.

VII. Claim 177, as specifically drawn to a method of treating a subject having or at risk of developing cancer comprising administering to a subject in need of such treatment an enzyme inhibitor and an agent of Formula I in an amount to inhibit the cancer, classified in class 514, subclass 16.

VIII. Claim 182, as specifically drawn to a method of treating a subject having or at risk of developing cardiovascular disease comprising administering to a subject in need of such treatment an agent of Formula I in an amount effective to induce an effective amount of IL-1, classified in class 514, subclass 16.

IX. Claim 184, as specifically drawn to a method for preventing drug resistance in a subject having an infectious disease comprising administering to a subject receiving an anti-microbial agent, an agent of Formula I in an amount effective to reduce the risk of resistance to the anti-microbial agent, classified in class 514, subclass 16.

X. Claim 261, as specifically drawn to a composition comprising an effective amount of an agent of Formula I and an antibody or antibody fragment, classified in class 530, subclass 387.1.

XI. Claim 290, as specifically drawn to a composition comprising an effective amount of an agent of Formula I and a cancer antigen, classified in class 530, subclass 828.

XII. Claim 320, as specifically drawn to a composition comprising an effective amount of an agent of Formula I and a microbial antigen, wherein the agent of Formula I is formulated for administration at a dose of greater than 10^{-8}M, classified in class 530, subclass 825, 826.

The inventions are distinct, each from the other because of the following reasons:

The inventions of Groups I-IX are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the specification does not disclose that their methods would be used together. The method for stimulating an immune response in a subject having cancer comprising administering a compound of Formula I and an antibody (Group I), the method for stimulating an immune response in a subject having an infectious disease comprising administering a compound of Formula I and an antibody (Group II), the method for stimulating an immune response in a subject having cancer comprising administering a compound of formula I and a cancer antigen (Group III), a method for stimulating an immune response in a subject comprising administering a compound of formula I and any antigen (Group IV), a method for stimulating an immune response in a non-immunocompromised subject comprising administering a compound of Formula I (Group V), a method of treating a subject having an IFN-responsive condition comprising administering an agent of Formula I (Group VI), a method of treating a subject having cancer comprising administering an enzyme inhibitor and an agent of Formula I (Group VII), a method of treating a subject having a cardiovascular disease comprising administering an agent of Formula I (Group VIII), and a method of preventing drug resistance in a subject having an infectious disease comprising administering to a subject receiving an anti-microbial agent, an agent of Formula I (Group IX) are unrelated as they comprise distinct steps and utilize different products which demonstrates that each method has a different mode of operation. Each invention performs this function using structurally and functionally divergent material. Moreover, the methodology, materials and outcome necessary for treatment and/or stimulation differ significantly for each of the materials. For the stimulating/treatment of a patient suffering from cancer, an antibody, cancer antigen, or enzyme inhibitor may be administering in

combination with an agent of Formula I. Moreover, the agent of Formula I itself can be used either alone or in combination with other "agents" to treat and/or prevent and/or stimulate the immune response in a patient suffering from or at risk of developing an infectious disease, a cardiovascular disease, resistance to anti-microbial agents, or an IFN-responsive condition. Therefore, each method is divergent in materials and steps. For these reasons the inventions of Groups I-IX are patentably distinct.

Furthermore, the distinct steps and products require separate and distinct searches. The inventions of Groups I-IX have a separate status in the art as shown by their different classifications. As such, it would be burdensome to search the inventions of Groups I-IX.

The inventions of Groups X-XII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the specification does not disclose that the products would be used together. Although the compositions all comprise an agent of Formula I, the composition comprising an antibody and/or antibody fragment (Group X), the composition comprising a cancer antigen (Group XI) and the composition comprising a microbial antigen (Group XII) are unrelated as they comprise separate and distinct materials which are structurally and functionally divergent material. Therefore, the products are divergent in materials, which can be used in different methods. For these reasons the inventions of Groups X-XII are patentably distinct.

Furthermore, the distinct steps and products require separate and distinct searches. The inventions of Groups X-XII have a separate status in the art as shown by their different classifications. As such, it would be burdensome to search the inventions of Groups X-XII.

The inventions of Group X and Groups I-II are related as product and processes of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the composition comprising an antibody and a agent of Formula I can be used in a materially different process of using that product such as for stimulating

an immune response in a patient suffering from cancer or in a patient suffering from an infectious disease.

The inventions of Groups XI-XII and Group IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the process of stimulating an immune response in a subject comprising administering an agent of Formula I and an antigen can be practiced with another materially different product such as either a composition comprising a cancer-antigen or a microbial antigen.

Because the inventions are distinct for the reasons given above, have acquired a separate status in the art as shown by their different classification, and the search required for each group is not required for other groups because each group requires a different non-patent literature search due to each group comprising different products and/or method steps, restriction for examination purposes as indicated is proper.

Species Election

This application contains claims directed to the following patentably distinct species of the claimed invention:

Claim 166 which encompasses claims 4-7, Groups I-II, is generic to a plurality of disclosed patentably distinct species comprising the following antibodies: trastuzumab (Herceptin), rituximab (Rituxan), Avastin ... Zamyl and Zevalin each of which differ at least in antigen specificity and chemical structure as such one could not be interchanged with the other.

Claim 255, Groups I-II, is generic to a plurality of disclosed patentably distinct species comprising the following cytokines: IL-1, G-CSF and IL-8 each of which differ at least in function such that one could not be interchanged with the other.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon,

including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Note:

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. **Process claims that depend from or otherwise include all the limitations of the patentable product** will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be

maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.**

Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Fetterolf, PhD whose telephone number is (571)-272-2919. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Siew can be reached on 571-272-0787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brandon J Fetterolf, PhD
Examiner
Art Unit 1642

BF

JEFFREY SIEW
SUPERVISORY PATENT EXAMINER
6/22/09

Continuation of Disposition of Claims: Claims pending in the application are 1-18,24,25,30,81,90,97,139,142,144,166,168,177,182,184,188,191,195,197,210,251-261,290,320 and 338.